WHAT IS CLAIMED IS:

1. An access control method for a hard disk, comprising the steps of:

(A) partitioning the hard disk into primary and secondary partitions;

(B) in response to a write command from a host terminal for storing write data in an addressable space found in the primary partition of the hard disk,

(i) creating a recovery file that includes a write time, an address of the addressable space, and recover information including a starting data found in the addressable space of the hard disk during the write time, and

(ii) storing the write data in the primary partition at the address of the addressable space, and the recovery file in the secondary partition; and

(C) in response to a recover command from the host terminal,

(a) retrieving the recovery files from the secondary partition, the write time in each of the retrieved recovery files being not earlier than a recovery time associated with the recover command, and

(b) based on the contents of the recovery files retrieved in sub-step (a), restoring the primary partition to the starting data initially found therein during the recovery time.

2. The method of Claim 1, wherein, in sub-step (ii),

the address of the addressable space, the write data and the recovery file are stored in a buffer prior to storage in the hard disk.

3. The method of Claim 1, wherein the recover information
5 further includes the write data.

4. The method of Claim 1, wherein, in sub-step (b), restoring of the primary partition is performed in a chronological order of the write times in the retrieved recovery files starting from one of the retrieved
10 recovery files having a latest write time.

5. The method of Claim 1, further comprising the step of reporting a total storage capacity of the hard disk as being equal to that of the primary partition in response to a capacity inquiry command from the host
15 terminal.

6. An access control module for a hard disk that is partitioned into primary and secondary partitions, said access control module being responsive to write and recover commands from a host terminal, and comprising:
20   a processor;
    a first interface adapted to connect said processor to the host terminal;
    a second interface adapted to connect said processor to the hard disk;
25   a command interpreter coupled to said first interface for interpreting the write and recover commands; and
    a recovery file creator coupled to said processor

and said command interpreter;

wherein, in response to the write command for storing write data in an addressable space found in the primary partition of the hard disk, said command interpreter

5   enables said recovery file creator to create a recovery file that includes a write time, an address of the addressable space, and recover information including a starting data found in the addressable space of the hard disk during the write time, and further enables

10 said processor to store the write data in the primary partition at the address of the addressable space, and the recovery file in the secondary partition; and

wherein, in response to the recover command from the host terminal, said command interpreter enables said

15 processor

to retrieve the recovery files from the secondary partition, the write time in each of the retrieved recovery files being not earlier than a recovery time associated with the recover command, and

20 based on the contents of the recovery files retrieved by said processor, to restore the primary partition to the starting data initially found therein during the recovery time.

7. The access control module of Claim 6, further

25 comprising a buffer coupled to said processor, said processor storing the address of the addressable space, the write data and the recovery file in said buffer prior

to storage in the hard disk.

8. The access control module of Claim 6, wherein the recover information further includes the write data.

9. The access control module of Claim 6, wherein said processor restores the primary partition in a chronological order of the write times in the retrieved recovery files starting from one of the retrieved recovery files having a latest write time.